IN THE CLAIMS:

1.   (Currently Amended) A parallel stream operation apparatus, comprising:

a plurality of paths, each corresponding to a different one of a plurality of keys used for <u>one of</u> encrypting and[[/or]] decrypting data streams;

an input stream processing unit ~~operable to receive~~ <u>receiving</u> a plurality of data streams in parallel, and ~~output~~ <u>outputting</u> each data stream to ~~a corresponding~~ <u>the</u> one of the paths <u>that corresponds to a key that, from among the plurality of keys, is for one of encrypting and decrypting the data stream</u>; and

an operation unit ~~operable to~~ <u>performing,</u> ~~decrypt or encrypt each data stream with a corresponding one of the keys~~ <u>with respect to each of the data streams output to the paths, one of decryption and encryption using the key in correspondence with the path to which the data stream was output</u>.

2.   (Currently Amended) The parallel stream operation apparatus of Claim 1, further comprising:

an output stream processing unit ~~operable to receive~~ <u>receiving</u> the plurality of data streams that have been decrypted or encrypted by the operation unit, and output each received data stream to a different one of a plurality of output interfaces.

3.   (Currently Amended) The parallel stream operation apparatus of Claim 2, wherein

the output stream processing unit includes a crossbar switch, and

the parallel stream operation apparatus further comprises:

5   a switch control unit ~~operable to set~~ <u>setting</u> each contact point in the crossbar switch on or off, thereby setting a plurality of output interfaces as output destinations to which the output stream processing unit is to output the encrypted or decrypted data streams, the output interfaces being determined according to which of the paths the data streams were output to by the input stream processing unit; and

10   a notification unit ~~operable to receive~~ <u>receiving</u> each data stream from the paths, output each received data stream and the corresponding key to the operation unit, and notify the switch control unit of path information of each input data stream.

     4.   (Currently Amended) The parallel stream operation apparatus of Claim 2, wherein

          the operation unit is one of a plurality of operation units in the parallel stream operation apparatus, and

5   the parallel stream operation apparatus further comprises:

          a notification unit ~~operable to receive~~ <u>receiving</u> the plurality of data streams from the paths, input in parallel each of the plurality of received data streams and the corresponding key to a different one of the operations units, and notify each operation unit of path information of the data stream input to the operation unit; and

10   a selection control unit ~~operable~~ <u>selecting</u>, for each of the encrypted or decrypted data streams output from the output stream processing unit, ~~to select, according to the path information of the data stream,~~ an output interface as an output destination of the data stream <u>according to the path information of the data stream</u>.

5.   (Original) The parallel stream operation apparatus of Claim 2, wherein

the input stream processing unit outputs one of the data streams to two of the paths, and

one of the two paths is connected to the operation unit, and the other of the two paths is directly connected to the output stream processing unit.

6.   (Original) The parallel stream operation apparatus of Claim 1, wherein

the input stream processing unit has a crossbar switch, and outputs each of the data streams to the respective corresponding paths by setting switches in the crossbar on, each of the switches being at a contact point of an input line by which the data stream has been input to the input stream processing unit and an output line that is connected to a path corresponding to the key for encrypting or decrypting the data stream.

7.   (Original) The parallel stream operation apparatus of Claim 1, further comprising:

a re-input path for re-inputting, into the input stream processing unit, one of the data streams that has already been encrypted or decrypted and output by the operation unit,

wherein the operation unit encrypts or decrypts the input data stream that has already been encrypted or decrypted, using a key that is different to a key previously used to encrypt or decrypt the data.

8.   (Original) The parallel stream operation apparatus of Claim 1, wherein

the input stream processing unit multiplexes at least two of the plurality of data streams to generate one data stream.

9. (Original) The parallel stream operation apparatus of Claim 1, wherein

the input stream processing unit demultiplexes one of the input data streams to generate a plurality of data streams.

10. (Currently Amended) A parallel stream operation method used in a parallel stream operation apparatus that includes a plurality of paths, each of the paths corresponding to a different one of a plurality of keys used for <u>one of</u> encrypting and[[/or]] decrypting data streams, the method comprising:

an input stream processing step of receiving a plurality of data streams in parallel, and outputting each data stream to ~~a corresponding~~ <u>the</u> one of the paths <u>that corresponds to a key that, from among the plurality of keys, is for one of encrypting and decrypting the data stream</u>; and

an operation step of, ~~decrypting or encrypting each data stream with a corresponding one of the keys~~ <u>with respect to each of the data streams output to the paths, performing one of decryption and encryption using the key in correspondence with the path to which the data stream was output</u>.

11. (Currently Amended) A parallel stream operation program executed in a computer in a parallel stream operation apparatus that includes a plurality of paths, each of the paths corresponding to a different one of a plurality of keys used for <u>one of</u> encrypting and[[/or]] decrypting data streams, the program comprising:

an input stream processing step of receiving a plurality of data streams in parallel, and outputting each data stream to ~~a corresponding~~ <u>the</u> one of the paths <u>that corresponds to a key</u>

that, from among the plurality of keys, is for one of encrypting and decrypting the data stream; and

an operation step of, ~~decrypting or encrypting each data stream with a corresponding one of the keys~~ with respect to each of the data streams output to each of the paths, perform one of decryption and encryption using the key in correspondence with the path to which the data stream was output.

12. (Currently Amended) A television reception apparatus, comprising:

a plurality of paths, each corresponding to a different one of a plurality of keys used for one of encrypting and[[/or]] decrypting data streams;

an input stream processing unit ~~operable to receive~~ receiving a plurality of data streams in parallel, and ~~output~~ outputting each data stream to ~~a corresponding~~ the one of the paths that corresponds to a key that, from among the plurality of keys, is for one of encrypting and decrypting the data stream; and

an operation unit ~~operable~~ to performing, ~~decrypt or encrypt each data stream with a corresponding one of the keys~~ with respect to each of the data streams output to each of the paths, one of decryption and encryption using the key in correspondence with the path to which the data stream was output.

13. (New) The parallel stream operation apparatus of claim 1 wherein the input stream processing unit converts the plurality of data streams to a format that is useable as content data before outputting each data stream to the one of the paths that corresponds to a key that, from among the plurality of keys, is for one of encrypting and decrypting the data stream.

14. (New) The parallel stream operation apparatus of claim 13 wherein the input stream processing unit converts the plurality of data streams to a packetized elementary stream packet format before outputting each data stream to the one of the paths that corresponds to a key that, from among the plurality of keys, is for one of encrypting and decrypting the data stream.

15. (New) The parallel stream operation apparatus of claim 3 wherein the output stream processing unit modifies a flag in the data stream to reflect that the data stream has been decrypted.

16. (New) The television reception apparatus of claim 12 wherein the data streams include at least video data and audio data.

17. (New) The television reception apparatus of claim 16 wherein the input stream processing unit multiplexes at least two of the plurality of data streams to generate one data stream.

18. (New) The television reception apparatus of claim 16 wherein the input stream processing unit demultiplexes one of the input data streams to generate a plurality of data streams.

19. (New) The television reception apparatus of claim 16 wherein the input stream processing unit converts the plurality of data streams to a packetized elementary stream packet format before outputting each data stream to the one of the paths that corresponds to a key that, from among the plurality of keys, is for one of encrypting and decrypting the data stream.